Science direct

CONTENTS

No. 1, September 20, 1951

PAGE

Anderson, John D. Galvanotaxis of slime mold 1

Chien, Helen L., and Collier, H. Bruce. The action of some hemolysis accelerators upon lipid and protein monolayers 17

Riggs, Austen. The metamorphosis of hemoglobin in the bullfrog 23

Riggs, Austen. The oxygen equilibrium of the hemoglobin of the eel, *Anguilla rostrata* 41

Wald, George, and Riggs, Austen. The hemoglobin of the sea lamprey, *Petromyzon marinus* 45

Dethier, V. G. The limiting mechanism in tarsal chemoreception 55

Milstone, J. H. Fractionation of plasma globulin for prothrombin, thrombokinase, and accessory thromboplastin 67

Kunkel, Henry G., and Tiselius, Arne. Electrophoresis of proteins on filter paper 89

Ajl, Samuel J. Studies on the mechanism of acetate oxidation by bacteria. VI. Comparative patterns of acetate oxidation by citrate-grown and acetate-grown *Aerobacter aerogenes* 119

Gallego, A. Loss and recovery of excitability by normal and by degenerating nerves deprived of sodium 129

Lorente de Nó, R. Equilibria of frog nerve with different external concentrations of sodium ions 145

No. 2, November 20, 1951

Lorente de Nó, R. On the existence of a gradient of sensitivity to the lack of sodium in the spinal roots of the bullfrog 183

Lorente de Nó, R. On the effect of cocaine upon sodium-deficient frog nerve 203

Gallego, A., and Lorente de Nó, R. On the effect of ammonium and lithium ions upon frog nerve deprived of sodium 227

Monroy, Alberto, and Oddo, Anna Monroy. Solubility changes of proteins in sea urchin eggs upon fertilization 245

Lloyd, David P. C. Electrical signs of impulse conduction in spinal motoneurons 255

Lloyd, David P. C. After-currents, after-potentials, excitability, and ventral root electrotonus in spinal motoneurons 289

Blum, Harold F., Robinson, J. Courtland, and Loos, Gordon M. The loci of action of ultraviolet and x-radiation and of photorecovery in the egg and sperm of the sea urchin *Arbacia punctulata*. Plate 1 323

PAGE

LAPORTE, Y. Continuous conduction of impulses in peripheral myelinated nerve fibers 343

No. 3, JANUARY 20, 1952

PONDER, ERIC. Separation and assay of lysins and lysin-inhibitor complexes in blood and tissues 361

SCHOLANDER, P. F., CLAFF, C. LLOYD, ANDREWS, J. R., and WALLACH, D. F. Microvolumetric respirometry. Methods for measuring O_2 consumption and CO_2 production by cells and enzymic reactions 375

SACKTOR, BERTRAM. The cytochrome *c* oxidase of the house fly, *Musca domestica* L. 397

PRICE, WINSTON H. Phage formation in *Staphylococcus muscae* cultures. X. The relationship between virus synthesis, the release of bacterial ribonucleic acid, virus liberation, and cellular lysis 409

KUNITZ, M. Crystalline inorganic pyrophosphatase isolated from bakers' yeast 423

SCHACHMAN, H. K. Ultracentrifuge, electrophoresis, and viscosity studies on crystalline pyrophosphatase 451

LATARJET, RAYMOND, and CALDAS, LUIS RENATO. Restoration induced by catalase in irradiated microorganisms 455

NORTHROP, JOHN H. The effect of various culture media on infection, growth, lysis, and phage production of *B. megatherium* 471

GREGERMAN, ROBERT I. Adrenalin and hydroxytyramine in the parotid gland venom of the toad, *Bufo marinus* 483

GREGERMAN, ROBERT I., and WALD, GEORGE. The alleged occurrence of adrenalin in the mealworm 489

ST. GEORGE, ROBERT C. C. The interplay of light and heat in bleaching rhodopsin 495

OSTERHOUT, W. J. V. Some aspects of protoplasmic motion 519

ALLFREY, V., STERN, H., MIRKSY, A. E., and SAETREN, H. The isolation of cell nuclei in non-aqueous media 529

STERN, H., ALLFREY, V., MIRSKY, A. E., and SAETREN, H. Some enzymes of isolated nuclei 559

No. 4, MARCH 20, 1952

OSTERHOUT, W. J. V. The mechanism of accumulation in living cells 579

PONDER, ERIC, and COX, R. T. Hemolysis considered as a progressive reaction in a heterogeneous system 595

HENDRY, EDWARD B. Delayed hemolysis of human erythrocytes in solutions of glucose 605

COLLIER, H. BRUCE. Factors affecting the hemolytic action of "lysolecithin" upon rabbit erythrocytes 617

PAGE

LI, CHOH HAO, and PEDERSEN, KAI O. Physicochemical characterization of pituitary follicle-stimulating hormone 629

HOBERMAN, HENRY D., METZ, CHARLES B., and GRAFF, JACK. Uptake of deuterium into proteins of fertilized and unfertilized *Arbacia* eggs suspended in heavy water 639

DOERMANN, A. H. The intracellular growth of bacteriophages. I. Liberation of intracellular bacteriophage T4 by premature lysis with another phage or with cyanide 645

ANDERSON, THOMAS F., and DOERMANN, A. H. The intracellular growth of bacteriophages. II. The growth of T3 studied by sonic disintegration and by T6-cyanide lysis of infected cells 657

No. 5, MAY 20, 1952

TEORELL, TORSTEN. Permeability properties of erythrocyte ghosts 669

BOZLER, EMIL. The effect of electrolytes on the contractile elements of muscle 703

PERLMANN, GERTRUDE E. Enzymatic dephosphorylation of ovalbumin and plakalbumin 711

PAPPENHEIMER, A. M., JR., and WILLIAMS, CARROLL M. The effects of diphtheria toxin on the *Cecropia* silkworm 727

PRICE, WINSTON H. Phage formation in *Staphylococcus muscae* cultures. XI. The synthesis of ribonucleic acid, desoxyribonucleic acid, and protein in uninfected bacteria 741

BRIGGS, ROBERT. An analysis of the inactivation of the frog sperm nucleus by toluidine blue 761

ANDERSON, NORMAN G., and WILBUR, KARL M. Studies on isolated cell components. IV. The effect of various solutions on the isolated rat liver nucleus. Plate 2 781

WALD, GEORGE, and BROWN, PAUL K. The role of sulfhydryl groups in the bleaching and synthesis of rhodopsin 797

No. 6, JULY 20, 1952

DETHIER, V. G., and YOST, M. T. Olfactory stimulation of blowflies by homologous alcohols 823

ALLFREY, V., and MIRSKY, A. E. The incorporation of N^{15}-glycine by avian erythrocytes and reticulocytes *in vitro* 841

COMMONER, BARRY, and DIETZ, PHYLLIS M. Changes in non-protein nitrogen metabolism during tobacco mosaic virus biosynthesis 847

BAER, B. S., and KRUEGER, A. P. The *B. mycoides* N host-virus system. I. Differences in appearance and "rate of growth" of the lysogenic and parent indicator strains. Plates 3 and 4 857

PAGE

BARRON, E. S. GUZMAN, and SEKI, S. LOUISE. Studies on the mechanism of action of ionizing radiations. VII. Cellular respiration, cell division, and ionizing radiations 865

FRENCH, C. S., and YOUNG, VIOLET K. The fluorescence spectra of red algae and the transfer of energy from phycoerythrin to phycocyanine and chlorophyll 873

LEFEVRE, PAUL G., and LEFEVRE, MARIAN E. The mechanism of glucose transfer into and out of the human red cell 891

HARDWICK, W. A., and FOSTER, J. W. On the nature of sporogenesis in some aerobic bacteria 907

INDEX TO VOLUME 35 929